## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of Claims:**

- 1. (Currently Amended) A method of driving a plasma display panel having first and second row electrodes and including a sustain period for implementing a gray scale, comprising:
- alternately applying first and second sustain pulses having a different width during the sustain period to the first and second row electrodes, wherein widths of the first and second sustain pulses are based on a resistance between a first driver and at least one of the first row electrodes and a resistance between a second driver and at least one of the second row electrodes.
- 2. (Currently Amended) The method as claimed in claim 1, wherein [[a]] the resistance going from [[a]]the first driver generating the first sustain pulse into the <u>at least one of the first row electrodes</u> is different from [[a]]the resistance going from [[a]] the second driver generating the second sustain pulse into the <u>at least one of the second row-electrode electrodes</u>.

- 3. (Currently Amended) The method as claimed in claim 2, wherein said resistance going from the first driver into the <u>at least one of the</u> first row <u>electrode electrodes</u> is larger than [[a]] <u>the</u> resistance going from the second driver into the <u>at least one of the</u> second row <u>electrode</u> <u>electrodes</u>.
- 4. (Previously Presented) The method as claimed in claim 3, wherein a width of the first sustain pulse is longer than a width of the second sustain pulse.
- 5. (Previously Presented) The method as claimed in claim 3, wherein the first sustain pulse is longer than the second sustain pulse.
- 6. (Original) The method as claimed in claim 5, wherein a rising edge caused by an energy recovering circuit of the first sustain pulse is shorter than a rising edge caused by the energy recovering circuit of the second sustain pulse.
- 7. (Currently Amended) The method as claimed in claim 2, wherein [[a]]the resistance going from the second driver into the <u>at least one of the second row electrode</u> <u>electrodes</u> is larger than [[a]]the resistance going from the first driver into the <u>at least one of the</u> first row-electrode electrodes.

- 8. (Previously Presented) The method as claimed in claim 7, wherein a width of the second sustain pulse is longer than a width of the first sustain pulse.
- 9. (Previously Presented) The method as claimed in claim 7, wherein the second sustain pulse is longer than the first sustain pulse.
- 10. (Original) The method as claimed in claim 9, wherein a rising edge caused by an energy recovering circuit of the second sustain pulse is shorter than a rising edge caused by the energy recovering circuit of the first sustain pulse.
  - 11. (Canceled).
- 12. (Currently Amended) A method of driving a plasma display panel having first and second row electrodes, the method comprising:

applying first sustain pulses having a first width during a sustain period to the first row electrodes; and

applying second sustain pulses having a second width during the sustain period to the second row electrodes, the first width being different than from the second width, wherein the first width of the first sustain pulses and the second width of the second sustain pulses are

based on a resistance between a first driver and the first row electrodes and a resistance between a second driver and the second row electrodes.

- 13. (Currently Amended) The method as claimed in claim 12, wherein [[a]] the resistance from [[a]] the first driver to the first row electrodes is different than a from the resistance from [[a]] the second driver to the second row electrodes.
- 14. (Previously Presented) The method as claimed in claim 13, wherein said resistance from the first driver to the first row electrodes is larger than the resistance from the second driver to the second row electrodes.
- 15. (Previously Presented) The method as claimed in claim 14, wherein the first width of the first sustain pulse is wider than the second width of the second sustain pulse.
- 16. (Previously Presented) The method as claimed in claim 14, wherein a rising edge of the first sustain pulse is shorter than a rising edge of the second sustain pulse.
- 17. (Previously Presented) The method as claimed in claim 16, wherein the rising edge of the first sustain pulse and the rising edge of the second sustain pulse are based on an energy recovery circuit.

- 18. (Previously Presented) The method as claimed in claim 13, wherein the resistance from the second driver to the second row electrode is larger than the resistance from the first driver to the first row electrode.
- 19. (Previously Presented) The method as claimed in claim 18, wherein the second width of the second sustain pulse is wider than the first width of the first sustain pulse.
- 20. (Previously Presented) The method as claimed in claim 18, wherein a rising edge of the second sustain pulse is shorter than a rising edge of the first sustain pulse.
- 21. (Previously Presented) The method as claimed in claim 20, wherein the rising edge of the first sustain pulse and the rising edge of the second sustain pulse are based on an energy recovery circuit.
  - 22. (Canceled).
- 23. (Currently Amended) A plasma display driving method comprising:

  applying a first sustain pulse to a first row electrode during a sustain period; and applying a second sustain pulse to a second row electrode during the sustain period, the first sustain pulse being different than from the second sustain pulse, wherein a width

of the first sustain pulse is based on a resistance from a first driver to the first row electrode, and a width of the second sustain pulse is based on a resistance from a second driver to the second row electrode.

- 24. (Canceled).
- 25. (Previously Presented) The method as claimed in claim 23, wherein the first sustain pulse is longer than the second sustain pulse.
- 26. (Previously Presented) The method as claimed in claim 25, wherein a rising edge of the first sustain pulse is shorter than a rising edge of the second sustain pulse.
- 27. (Currently Amended) The method as claimed in claim [[23]]28, wherein the second sustain pulse is longer than the first sustain pulse.
- 28. (Currently Amended) The method as claimed in claim 27, A plasma display driving method comprising:

applying a first sustain pulse to a first row electrode within a sustain period; and applying a second sustain pulse to a second row electrode within the sustain period, the first sustain pulse being different from the second sustain pulse such that the first

sustain pulse and the second sustain pulse are asymmetric, wherein a rising edge of the second sustain pulse is shorter than a rising edge of the first sustain pulse.

- 29. (Canceled).
- 30. (Currently Amended) A plasma display driving method comprising:

  applying a plurality of first sustain pulses to row electrodes, each first sustain pulse width having a first width; and

applying a plurality of second sustain pulses to row electrodes, each at least one second sustain pulse having a second width which is different from the first width, wherein a rising edge of the first sustain pulses are shorter or longer than a rising edge of the at least one second sustain pulse.

- 31. (Previously Presented) The method of claim 30, wherein the first sustain pulses are applied to scan electrodes and the second sustain pulses are applied to sustain electrodes.
- 32. (Previously Presented) The method of claim 30, wherein the first sustain pulses and the second sustain pulses are applied during a sustain period.

33. (New) A method of driving a plasma display comprising:

applying at least one first sustain pulse to at least one first row electrode in a middle of a sustain period; and

applying at least one second sustain pulse to at least one second row electrode during the sustain period, and the at least one second sustain pulse being applied subsequent to the at least one first sustain pulse, wherein a rising time of the at least one first sustain pulse or the at least one second sustain pulse is different from a falling time of the at least one first sustain pulse or the at least one second sustain pulse, respectively, wherein a width of the at least one first sustain pulse is different from a width of the at least one second sustain pulse, and the sustain period is included in at least one subfield.

- 34. (New) The method of claim 33, wherein the rising time is longer than the falling time.
- 35. (New) The method of claim 33, wherein the width of the at least one second sustain pulse is shorter or longer than the width of the at least one first sustain pulse.
- 36. (New) The method of claim 33, wherein the at least one first sustain pulse is repeatedly applied to the at least one first row electrode such that the at least one first sustain pulse comprises a plurality of first sustain pulses.

Docket No. YHK-0114

Serial No. 10/630,720 Reply to Office Action dated March 14, 2005

- 37. (New) The method of claim 36, wherein the at least one second sustain pulse is repeatedly applied to the at least one second row electrode such that the at least one second sustain pulse comprises a plurality of second sustain pulses, and the first sustain pulse and the second sustain pulse are alternately applied to the at least one first row electrode and the at least one second row electrode, respectively.
- 38. (New) The method of claim 33, wherein the rising time comprises a time period for the at least one first sustain pulse or the at least one second sustain pulse to change from a first potential level to a second potential level.
- 39. (New) The method of claim 38, wherein the second potential level has a higher magnitude than the first potential level.
- 40. (New) The method of claim 38, wherein the falling time comprises a time period for the at least one first sustain pulse or the at least one second sustain pulse to change from a third potential level to a fourth potential level.
- 41. (New) The method of claim 40, wherein the third potential level has a higher magnitude than the fourth potential level.

- 42. (New) The method of any one of claims 33-41, wherein the width of the at least one first sustain pulse or the width of the at least one second sustain pulse comprises the rising time, the falling time, and a prescribed period of time between the rising time and the falling time.
- 43. (New) The method of claim 42, wherein the prescribed period of the at least one first sustain pulse is longer or shorter than the prescribed period of the at least one second sustain pulse.
- 44. (New) The method of claim 33, wherein at least one of the first sustain pulse or the second sustain pulse causes a sustain discharge during the sustain period.
- 45. (New) The method of claim 33, wherein a resistance between a first driver and at least one first row electrode is different from a resistance between a second driver and at least one second row electrode.
- 46. (New) The method of claim 33, 44 or 45, wherein the at least one first row electrode comprises a plurality of scan electrodes arranged on a first substrate and the at least one second row electrode comprises a plurality of sustain electrodes arranged on the first substrate and parallel to the plurality of scan electrodes, a plurality of address electrodes formed

on a second substrate and arranged to be perpendicular to the plurality of scan and sustain electrodes, a plurality of barrier ribs formed between the first and second substrates and a plurality of cells, wherein each cell is positioned at an intersection where each of the address electrodes intersect with corresponding scan and sustain electrodes.

47. (New) A method of driving a plasma display comprising:

applying at least one first sustain pulse to at least one scan electrode in a middle of a sustain period; and

applying at least one second sustain pulse to at least one sustain electrode and the at least one second sustain pulse being applied subsequent to the at least one first sustain pulse, wherein the rising time of the at least one second sustain pulse is different from the falling time of the at least one second sustain pulse, wherein a width of the at least one first sustain pulse is wider than a width of the at least one second sustain pulse, and a first prescribed time period for maintaining the at least one first sustain pulse near a first prescribed potential is longer than a second prescribed time period between the rising time and the falling time of the at least one second sustain pulse, and the sustain period is included in at least one subfield.

48. (New) The method of claim 47, wherein the rising time is longer than the falling time.

- 49. (New) The method of claim 47, wherein a magnitude of the first and second prescribed potentials are the same.
- 50. (New) The method of claim 47, wherein the at least one first sustain pulse is repeatedly applied to the at least one first row electrode such that the at least one first sustain pulse comprises a plurality of first sustain pulses.
- 51. (New) The method of claim 50, wherein the at least one second sustain pulse is repeatedly applied to the at least one second row electrode such that the at least one second sustain pulse comprises a plurality of second sustain pulses, and the first sustain pulse and the second sustain pulse are alternately applied to the at least one first row electrode and the at least one second row electrode, respectively.
- 52. (New) The method of claim 47, wherein the rising time comprises a time period for the at least one second sustain pulse to change from a first potential level to a second potential level.
- 53. (New) The method of claim 52, wherein the second potential level has a higher magnitude than the first potential level.

- 54. (New) The method of claim 52, wherein the second prescribed time period comprises a time for maintaining the at least one second sustain pulse near a second prescribed potential.
- 55. (New) The method of claim 54, wherein the second potential level corresponds to the second prescribed potential.
- 56. (New) The method of claim 52, wherein the falling time comprises a time period for the at least one second sustain pulse to change from a third potential level to a fourth potential level.
- 57. (New) The method of claim 56, wherein the third potential level has a higher magnitude than the fourth potential level.
- 58. (New) The method of claim 56, wherein the second prescribed time period comprises a time for maintaining the at least one second sustain pulse near a second prescribed potential.
- 59. (New) The method of claim 58, wherein the third potential level corresponds to the second prescribed potential.

- 60. (New) The method of any one of claims 47-59, wherein the width of the at least one second sustain pulse comprises the rising time, the falling time, and the second prescribed time period between the rising time and the falling time.
- 61. (New) The method of claim 60, wherein a rising time of the at least one first sustain pulse is the same as a falling time of the at least one first sustain pulse.
- 62. (New) The method of claim 60, wherein the width of the at least one first sustain pulse comprises a rising time, a falling time, and the first prescribed time period between the rising time and the falling time.
- 63. (New) The method of claim 47, wherein at least one of the first sustain pulse or the second sustain pulse causes a sustain discharge during the sustain period.
- 64. (New) The method of claim 47, wherein a resistance between a first driver and the at least one scan electrode is different from a resistance between a second driver and the at least one sustain electrode.
- 65. (New) The method of claim 47, 63 or 64, wherein the at least one scan electrode comprises a plurality of scan electrodes arranged on a first substrate and the at least one sustain

electrode comprises a plurality of sustain electrodes arranged on the first substrate and parallel to the plurality of scan electrodes, a plurality of address electrodes formed on a second substrate and arranged to be perpendicular to the plurality of scan and sustain electrodes, a plurality of barrier ribs formed between the first and second substrates and a plurality of cells, wherein each cell is positioned at an intersection where each of the address electrodes intersect with corresponding scan and sustain electrodes.

- 66. (New) The method of claim 28, wherein the rising edge of the second sustain pulse has a steeper slope than the rising edge of the first sustain pulse.
- 67. (New) The method of claim 28, wherein the first and second sustain pulses are asymmetric in width.
- 68. (New) The method of claim 67, wherein a width of the first sustain pulse is longer or shorter than a width of the second sustain pulse.
- 69. (New) The method of claim 28, 66, 67, or 68, wherein the rising edge of the first sustain pulse or the second sustain pulse comprises a transition from a first potential to a second potential, wherein the second potential is maintained for a prescribed period of time after the rising edge.

Serial No. 10/630,720 Reply to Office Action dated March 14, 2005

Docket No. YHK-0114

- 70. (New) The method of claim 69, wherein a time period for the rising edge of the first sustain pulse is shorter than a time period for the rising edge of the second sustain pulse.
- 71. (New) The method of claim 69, wherein the at least one first row electrode comprises a plurality of scan electrodes arranged on a first substrate and the at least one second row electrode comprises a plurality of sustain electrodes arranged on the first substrate and parallel to the plurality of scan electrodes, a plurality of address electrodes formed on a second substrate and arranged to be perpendicular to the plurality of scan and sustain electrodes, a plurality of barrier ribs formed between the first and second substrates and a plurality of cells, wherein each cell is positioned at an intersection where each of the address electrodes intersect with corresponding scan and sustain electrodes.